

Appendix A

// size is the size of the object being allocated
// result holds the pointer to the new object
// fp holds the per processor frontier pointer between
// zeroed memory and allocated objects.
// vt holds a pointer to the vtable for the object.

top:

	A	
mov reg, [fp]		
	B	
mov res, reg		
	C	
add reg, size		
	D	
mov AL, res		
	E	
cpxchg [fp], reg		// swap if fp hasn't changed.
	F	// Unsafe to do GC here.
jnz top		// if other thread allocated
	G	// Unsafe to do GC here.
mov [res], vt		
	H	

Sequence has been committed, new object is in register result.

Appendix B

// size is the size of the object being allocated
// result holds the pointer to the new object
// fp holds the per processor frontier pointer between
// zeroed memory and allocated objects.
// vt holds a pointer to the vtable for the object.

top:

	A
mov reg, [fp]	
	B
mov result, reg	
	C
add reg, size	
	D
cmovnh [result], vt	
	E
cmovnh [fp], reg	
	F
jh redo	

G

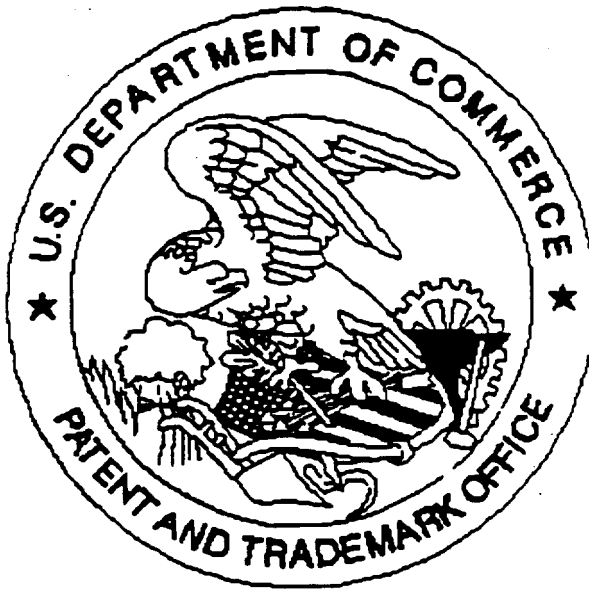
Sequence committed, result holds new object.

...

redo:

clh
jmp top:

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pages numbered 18 - 19 as part of the specification
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